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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,024	07/05/2001	Toru Inada	0054-0236P	9286

2292 7590 06/02/2005

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

WAHBA, ANDREW W

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/898,024	Applicant(s) INADA ET AL.	
	Examiner Andrew W. Wahba	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date: _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____                                                            | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takiyasu et al, hereinafter "Takiyasu" (US Patent 5,113,392) in view of Aziz et al, hereinafter "Aziz" (US Patent 5,548,646).

With regard to claim 1, Takiyasu discloses, if the length of a transmission message is equal to or shorter than 60 bytes (computing the packet length / comparing the computed packet length with a predetermined packet length), it can be transmitted by using a single cell. If it is longer than 60 bytes, it can be transmitted after being segmented (fragmentation unit) into a plurality of information blocks (plurality of divided data groups) on the 60 byte unit basis (predetermined data structure) (column 6, lines 17-22). The info field 16 (adding ... control information) indicates the position of a particular information block. For instance, if the information contained in the info field 16 is the first information block of a message segmented into multiple blocks, ST 15A is set to "10", "01" for the last information block, "00" for an intermediate information block and "11" for a single information block (column 6, lines 22-28).

Takiyasu does not expressly disclose or fairly suggest encryption means for separately encrypting the plurality of divided data packets to form a plurality of encrypted packets.

Aziz discloses a bridge TB1 that looks up hosts A and B in its tables and determines that the packets (plurality of divided data packets) to be transmitted (transmitting means) must first be encrypted (encryption means) (column 4, lines 38-41).

A person of ordinary skill in the art would have been motivated to employ Aziz in Takiyasu in order obtain encryption means so as to transmit sensitive information via networks such as Internet from one site to another in a manner that allows such information be secured from uninvited eyes as it traverses the network (Aziz, column 1, lines 13-17). At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art, to which the invention pertains, to combine Takiyasu with Aziz (collectively and hereinafter "Takiyasu-Aziz") so as to obtain the invention as specified in claim 1.

With regard to claim 2, refer to rejection of claim 1 (cryptographic apparatus). With specific regards to the additional limitations of claim 2, Aziz discloses that bridge TB2 (decryption apparatus) receives a packet and determines whether the packet was encrypted. If so, the appropriate decryption key is determined (Aziz, column 8, lines 22-31). The packet is sent (transmits) to host B at step 340 as illustrated by Figure 6 (column 8, lines 34-38). Takiyasu discloses an asynchronous port 28 (terminal that receives) that includes a reassemble unit 51 (reconstructs the divided data groups)

(Takiyasu, column 8, lines 13-15). The info field 16 (control information) indicates the position of a particular information block (Takiyasu, column 6, lines 22-28).

### ***Response to Arguments***

3. Applicant's arguments filed 05/13/2005 have been fully considered but they are not persuasive.

With regard to claim 1, on page 6, the applicant argues, "Takiyasu does not suggest any 'adding [of] control information for ensuring continuity between the divided data groups'." Takiyasu discloses that the info field 16 (adding ... control information) indicates the position of a particular information block. For instance, if the information contained in the info field 16 is the first information block of a message segmented into multiple blocks, ST 15A is set to "10", "01" for the last information block, "00" for an intermediate information block and "11" for a single information block (column 6, lines 22-28).

With further regard to claim 1, the applicant argues "since Takiyasu does not discuss encryption, fragmentation that is made necessary by the encryption is also not discussed" (page 7). The functions performed in claim 1, such as computing the packet length, may be performed on either an encrypted or non-encrypted packet. Encryption is added to a communication system so as to transmit sensitive information via networks such as Internet from one site to another in a manner that allows such information be secured from uninvited eyes as it traverses the network (Aziz, column 1, lines 13-17).

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew W Wahba whose telephone number is (571) 272-3081. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

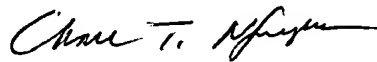
Art Unit: 2661

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully Submitted,

Andrew Wahba   
Patent Examiner  
February 14, 2005



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600